

molecule comprising a mammalian HCaRG, which has the sequence set out in SEQ ID NO: 3). These claims are supported by the originally filed claims which recite similar compositions comprising an HCaRG molecule.

Claims 35 and 41 are directed to an open reading frame encoding SEQ ID NO: 2 (claim 35) and SEQ ID NO: 4 (claim 41). These claims are supported by the specification which discloses the assembly of HCaRG DNA sequences "containing the complete [HCaRG] open reading frame." (Page 8, lines 19-20.) Claims 36-40 and 41-46 are dependent on claims 35 and 41, respectively. These claims are directed to recombinant vectors, recombinant host cells, and compositions of matter that comprise the open reading frame of SEQ ID NO: 2 or SEQ ID NO: 4. These dependent claims are supported by the originally filed claims as indicated above.

New claim 47 recites that the purified nucleic acid of claim 11 has a sequence that is perfectly complementary to SEQ ID NO: 1, SEQ ID NO: 3, or a complementary sequence thereof. Claim 47 is supported by the specification which discloses that "probes were generated from cDNA clone(s) by PCR or random labeling method." (Page 32, lines 20-21.) These cDNA clones have a sequence perfectly complementary to an HCaRG. New claims 48-52 depend from claim 47 and are similar to the originally filed claims that depend from claim 11.

New claim 53 recites that the purified nucleic acid of claim 11 hybridizes to the nucleic acids of the calcium sensing cell at 60°C in 4x SSC and 50% formamide. Claim 53 is supported by the specification which discloses that hybridization was performed "at 60°C in a chamber humidified with 4X SSC and 50% formamide." (Page 33, lines 27-28.) New claims 54-58 depend from claim 53 and are similar to the originally filed claims that depend from claim 11.

None of these amendments introduces new matter.

Respectfully submitted,

Date: December 20, 2002

By: Lisa M. Hemmendinger
for Michelle Holmes-Son
Registration No. 47,660

Banner & Witcoff, Ltd.
1001 G Street, NW
Washington, DC 20001
202-508-9100

Appendix I. Marked-Up Version of the Claims to Show the Changes Made

2. (Twice Amended) [The] A purified nucleic acid molecule comprising a mammalian Hypertension-Related Calcium-Regulated Gene (HCaRG) [as defined in claim 1], having the sequence set out in SEQ ID No. 1, or its complementary strand.
6. (Twice Amended) [The] A purified nucleic acid molecule comprising a mammalian HCaRG [as defined in claim 1], which has the sequence set out in SEQ ID No. 3.
7. (Amended) A recombinant vector comprising the nucleic acid of claim [1] 2.
14. (Amended) A composition of matter comprising the nucleic acid of claim [1] 2 and a carrier.
15. (Twice Amended) A composition of matter comprising the [nucleic acid] cDNA or mRNA of claim 24 and a carrier.
16. (Twice Amended) A composition of matter comprising the [nucleic acid] cDNA or mRNA of claim 25 and a carrier.
24. (Amended) [The purified nucleic acid molecule of claim 1 wherein the] An isolated HCaRG cDNA or mRNA that encodes SEQ ID NO: 2.
25. (Amended) [The purified nucleic acid molecule of claim 1 wherein the] An isolated HCaRG cDNA or mRNA that encodes SEQ ID NO: 4.

Appendix II. Clean Version of the Claims Following Entry of the Amendments

2. A purified nucleic acid molecule comprising a mammalian Hypertension-Related Calcium-Regulated Gene (HCaRG), having the sequence set out in SEQ ID No. 1, or its complementary strand.
6. A purified nucleic acid molecule comprising a mammalian HCaRG, which has the sequence set out in SEQ ID No. 3.
7. A recombinant vector comprising the nucleic acid of claim 2.
8. A recombinant vector comprising the nucleic acid of claim 24.
9. A recombinant host cell comprising the recombinant vector of claim 7.
10. A recombinant host cell comprising the recombinant of claim 8.
11. A purified nucleic acid of at least 12 nucleotides in length that hybridizes to nucleic acids of a calcium sensing cell and with SEQ ID No. 1, SEQ ID No. 3, or a complementary sequence thereof.
12. The nucleic acid as defined in claim 11 which is an amplification primer.
13. The nucleic acid as defined in claim 11, which is a hybridization probe.
14. A composition of matter comprising the nucleic acid of claim 2 and a carrier.
15. A composition of matter comprising the cDNA or mRNA of claim 24 and a carrier.
16. A composition of matter comprising the cDNA or mRNA of claim 25 and a carrier.
17. A composition of matter comprising the recombinant vector of claim 7 and a carrier.

18. A composition of matter comprising the recombinant vector of claim 8 and a carrier.
19. A composition of matter comprising the nucleic acid of claim 11 and a carrier.
20. A composition of matter comprising the nucleic acid of claim 12 and a carrier.
21. A composition of matter comprising the nucleic acid of claim 13 and a carrier.
22. A composition of matter comprising the recombinant host cell of claim 9 and a carrier.
23. A composition of matter comprising the recombinant host cell of 10 and a carrier.
24. An isolated HCaRG cDNA or mRNA that encodes SEQ ID NO: 2.
25. An isolated HCaRG cDNA or mRNA that encodes SEQ ID NO: 4.
26. A recombinant vector comprising the nucleic acid molecule of claim 25.
27. A recombinant host cell comprising the recombinant vector of claim 26.
28. A composition of matter comprising the recombinant vector of claim 25 and a carrier.
29. A composition of matter comprising the recombinant host cell of claim 27 and a carrier.
30. A recombinant vector comprising the nucleic acid of claim 6.
31. A recombinant host cell comprising the recombinant vector of claim 30.
32. A composition of matter comprising the nucleic acid of claim 6 and a carrier.
33. A composition of matter comprising the recombinant vector of claim 30 and a carrier.
34. A composition of matter comprising the recombinant host cell of claim 31 and a carrier.
35. An isolated open reading frame encoding SEQ ID NO: 2.
36. A recombinant vector comprising the open reading frame of claim 35.

37. A recombinant host cell comprising the recombinant vector of claim 36.
38. A composition of matter comprising the open reading frame of claim 35 and a carrier.
39. A composition of matter comprising the recombinant vector of claim 36 and a carrier.
40. A composition of matter comprising the recombinant host cell of claim 37 and a carrier.
41. An isolated open reading frame encoding SEQ ID NO: 4.
42. A recombinant vector comprising the open reading frame of claim 41.
43. A recombinant host cell comprising the recombinant vector of claim 42.
44. A composition of matter comprising the open reading frame of claim 41 and a carrier.
45. A composition of matter comprising the recombinant vector of claim 42 and a carrier.
46. A composition of matter comprising the recombinant host cell of claim 43 and a carrier.
47. The nucleic acid of claim 11 wherein the nucleic acid has a sequence that is perfectly complementary to SEQ ID No. 1, SEQ ID No. 3, or a complementary sequence thereof.
48. The nucleic acid of claim 47 which is an amplification primer.
49. The nucleic acid of claim 47 which is a hybridization probe.
50. A composition of matter comprising the nucleic acid of claim 47 and a carrier.
51. A composition of matter comprising the nucleic acid of claim 48 and a carrier.
52. A composition of matter comprising the nucleic acid of claim 49 and a carrier.
53. The nucleic acid of claim 11 wherein the nucleic acid hybridizes to the nucleic acids of the calcium sensing cell at 60°C in 4x SSC and 50% formamide.
54. The nucleic acid of claim 53 which is an amplification primer.
55. The nucleic acid of claim 53 which is a hybridization probe.
56. A composition of matter comprising the nucleic acid of claim 53 and a carrier.

57. A composition of matter comprising the nucleic acid of claim 54 and a carrier.
58. A composition of matter comprising the nucleic acid of claim 55 and a carrier.